

Previous Doc   Next Doc   Go to Doc#  
First Hit



Generate Collection

L25: Entry 61 of 97

File: JPAB

Jan 29, 1990

PUB-NO: JP402025721A  
DOCUMENT-IDENTIFIER: JP 02025721 A  
TITLE: THERMOMETER FOR VERY LOW TEMPERATURE

PUBN-DATE: January 29, 1990

## INVENTOR-INFORMATION:

NAME

TAKAHASHI, YOSHIKAZU

COUNTRY

## ASSIGNEE-INFORMATION:

NAME

JAPAN ATOM ENERGY RES INST

COUNTRY

APPL-NO: JP63176665

APPL-DATE: July 15, 1988

US-CL-CURRENT: 374/185

INT-CL (IPC): G01K 7/16; G01K 7/36

## ABSTRACT:

PURPOSE: To directly and exactly measure a temperature of a refrigerant by applying a fluctuation magnetic field to a sensor part which is attached to the inside of a very low temperature use refrigerant supply piping, and detecting an eddy current in the sensor part by a pickup coil.

CONSTITUTION: A sensor part 1 in which a metal or a semiconductor whose resistivity is varied sensitively in accordance with a temperature is formed in a cylindrical shape is attached to the inside of a very low temperature use refrigerant supply piping 2 by a supporting member 3 consisting of an electrical and thermal insulator. In such a state, the resistivity of the sensor part 1 is measured by applying a fluctuation magnetic field to the sensor part 1 by a fluctuation magnetic field use coil 5 from the outside of the piping 2, and also, detecting an eddy current which is induced in the sensor part 1 by a pickup coil 4, and a temperature is calculated by a processor. In such a way, it is unnecessary to connect a lead wire to the sensor part, it is unnecessary to install a field- through for the lead wire, and danger of a leakage into a vacuum of a refrigerant does not exist.

COPYRIGHT: (C)1990, JPO&amp;Japio

Previous Doc   Next Doc   Go to Doc#